

FUTURE PLANS

SYSTEM INFRASTRUCTURE

Wired Subscriber Network

The existing system was rebuilt in 2002. The current infrastructure, 870 Mhz HFC with 250 homes per node should meet the needs of the community through the term of this License.

Incremental system improvements, primarily associated with the need for increased bandwidth in the reverse path and reducing the number of homes per node is likely to be required during the License term. The Internet bandwidth requirements will grow as Internet service penetration rates will likely increase from the current level of 28% of homes passed to a projected 50-60% of homes passed by the end of the License. Similarly, the bandwidth requirements for each subscriber will also increase as video services and perhaps phone services are provided via the Internet.

SCC is prepared to assess the needs, develop business plans and make recommendations to upgrade the infrastructure accordingly.

WiFi – “Wireless” Internet

Although SCC is unsure of all of the potential applications of the technology WiFi (Wireless Fidelity), wireless Internet will likely be introduced in the community. SCC is positioned to be an active participant in delivering Internet services via this system, if necessary.

A project even now under consideration is a WiFi system for the Town Library whereby anyone in the Library, with a properly configured laptop, could access the Internet. More innovative projects, such as Wireless Internet in the Town Common, are a real possibility.

SERVICES

Video

SCC is committed to continue to provide video services consistent with the industry standards and most importantly, the community needs.

SCC appropriately prioritized the need to offer subscribers Internet services in advance of Digital Video service, however they are both being provided today.

SCC is the first CATV system in Massachusetts to offer High Definition Television service (HDTV). SCC will expand the HDTV service offerings as more services become available.

SCC has engaged the services of a consulting company to review options, costs, and service offerings associated with Video On Demand (VOD) services. VOD is a service/system whereby subscribers with Digital converters may choose to subscribe to a particular movie from a library of movies not unlike a video retail store. The movie is delivered electronically, almost instantaneously. The subscriber can watch, rewind, pause, or replay the movies over a prescribed period of time. VOD services are presently becoming available in a few cable systems across the country.

Internet Services

One can only imagine how Internet delivered services will evolve over the ten-year term of the License. They are likely to include voice over IP (telephone services), video delivery services or movies delivered with an interface with the television, home monitoring for security and utility services, and routine interaction with a wide range of service providers.

The home/school interface is likely to increase significantly. SCC is willing and able to work with the school department to ensure the infrastructure and Headend facilities are in place to meet their needs.

The delivering of medical services, diagnostics and elderly care and observation are likely to include the use of the Internet.

In all cases, SCC will provide reliable bandwidth to meet the subscriber needs.

SCC is currently working with a consortium of area colleges and research institutions to bring Internet II services to the Town's school system. Internet II is a separate Internet backbone system linking the colleges and research institutions from across the country.

Institutional Network

SCC, in close cooperation with the Town and school, has upgraded the I-Net termination equipment providing fiber optic based networks between all municipal buildings and schools.

The network has been expanded to provide radio repeater networks for the Police and Fire Departments.

It will be necessary to improve and expand the bandwidth of the Internet to meet the growing needs of the Town and particularly the school system.

The Institutional Network, either as a standalone network or the Internet as a medium, is likely to play an ever increasing role in the automation, motoring, and control of Town provided services including, but not limited to, electric, water and sewer, fire, police, public safety and highway.

Similarly, more and more remote access to the Town system will be available to employees from their homes that could improve response time to problems and remote alarming of emergency conditions.